

Ilyas Mohamed Iyob

Operations Research and Industrial Engineering
Department of Mechanical Engineering, University of Texas at Austin
1 University Station C2200 ETC 5.124, Austin, TX 78712
(479) 200 5173
iiyob@mail.utexas.edu

Current Position

PhD student and Graduate Research Assistant in Operations Research at UT Austin

Education

(2001-2003) BS Industrial Engineering (Summa Cum Laude), University of Arkansas
(2003-2004) MS Industrial Engineering, University of Arkansas
(2004-Present) PhD Operations Research, University of Texas at Austin
Cumulative GPA – 4.0

Research Publications

- Iyob, I.M., C.R. Cassady and E.A. Pohl “Establishing Maintenance Resource Levels using Selective Maintenance”, *Accepted for publication in The Engineering Economist*.
- Cassady, C.R., I.M. Iyob, K. Schneider and E.A. Pohl (2005) “A Generic Model of Equipment Availability under Imperfect Maintenance”, *IEEE Transactions on Reliability*, Vol. 54, No. 4, pp. 564-571.
- Iyob, I.M. and C.R. Cassady (2004). “Estimating System Cost under an Opportunistic Replacement Policy”, *Proceedings of the Industrial Engineering Research 2004 Conference*.
- Iyob, I.M., L.M. Maillart and C.R. Cassady (2003). “Simulating System Availability under an Opportunistic Replacement Policy”, *Proceedings of the 17th International Conference on Production Research*.
- Iyob, I.M. and C.R. Cassady (2003). “Analysis of Equipment Availability under Varying Corrective Maintenance Models”, *Proceedings of the Industrial Engineering Research 2003 Conference*.

Awards / Scholarships

- International level
World Prize for Mechanics (2001)
- National level
Sir Syed Merit Award (1998), Air India Merit Award (1999), MHEFI Honor (2002), All USA College Academic Team Nomination (2002-2003)
- State-College level
John D. Selig Scholarship (2002), Industrial Engineering Merit Awards (2002-2003), College of Engineering Scholarship (2003), Dr. Albert L. Steplock Memorial Endowed Scholarships (2002-2003), Dr. Hamdy A. Taha Scholarship (2003), Patti Johnson Wilson Scholarship (2003), Foundation of International Exchange Students (2003), Cisco Eagle Award (2003), Undergraduate Research Award (2003), Malstrom Memorial Scholarship Award (2004), University of Arkansas Senior Scholar (2004)

Skills and Experience

- Projects
- Cargill Foods, Jan - May 2002
This was a group project to improve the order processing system through the use of better methods and standards.
- Superior Wheels, Aug - Dec 2002
This was a group project to improve the ergonomic conditions by implementing and using an ergonomic tool specific to the company. The project also helped to bring the company up to the Occupational Safety and Health Act (OSHA) standards.

Cisco Eagle, Jan - May 2003

This was an individual consulting project to design the facilities layout for an existing distribution center. I received an award for this project.

Wal-Mart Logistics, Jan - Jul 2004

This project was to design, model and solve the transportation network optimization model of the Wal-Mart supply chain. Furthermore, a model was built to simulate a transshipment center for dynamic evaluation. Some of the preliminary work in this project was presented at the *Capstone Design Conference* in May 2004 at West Point, NY.

General Mills, May - Aug 2004

This was a consulting project to reduce the lead time by simulating the movement of products within a store.

Research

Mathematical modeling of the Imperfect Maintenance Policy, Oct 2001 - Aug 2002

This research project was motivated by the defense industry and yielded one journal paper that was published in the December 2005 issue of an A level journal known as *IEEE Transactions on Reliability*. This research has also been presented at the *2nd Annual Tech Summit Conference* in April 2002 at Fayetteville, AR and at the *4th International Conference on Mathematical Methods in Reliability* in June 2004 at Santa Fe, NM.

Mathematical modeling of Equipment Availability, Sep 2002 - May 2003

This research project yielded one conference paper that was presented at the *Industrial Engineering Research Conference* in May 2003 at Portland, OR.

Simulation modeling of the Opportunistic Replacement Policy, Sep 2002 - Jul 2003

This research project yielded two conference papers. The first one was presented at the *International Conference on Production Research* in August 2003 at Blacksburg, VA. A few weeks later, the second paper was presented at *INFORMS* at Atlanta, GA.

Optimization modeling of the Opportunistic Replacement Policy, Jul - Dec 2003

This research project yielded one conference paper that was presented at the *Industrial Engineering Research Conference* in May 2004 at Houston, TX.

Selective Maintenance Optimization modeling, Jan - Jul 2004

This research project was also motivated by the defense industry and was finally written up as my Masters Degree thesis. A journal paper on this research has been accepted for publication in *The Engineering Economist*.

Simulation modeling of store replenishment, May - Aug 2004

This research project yielded one journal paper that is under review with the *Journal of Business Logistics*.

Rational Escalation in All-Pay Auctions, May - Jul 2004

This research project yielded one journal paper that is to be submitted to the *Journal of Economic Behavior and Organization*.

Professional Activities

International level

Institute of Industrial Engineers, Tau Beta Pi

National level

Phi Kappa Phi, Omega Rho, Alpha Pi Mu

State-College level

International Students Organization (ISO), Pi Mu Epsilon, Students Helping Undergraduate Retention (SHUR)

References

Academic and work references available upon request